DIW Weekly Report 5+6 2021

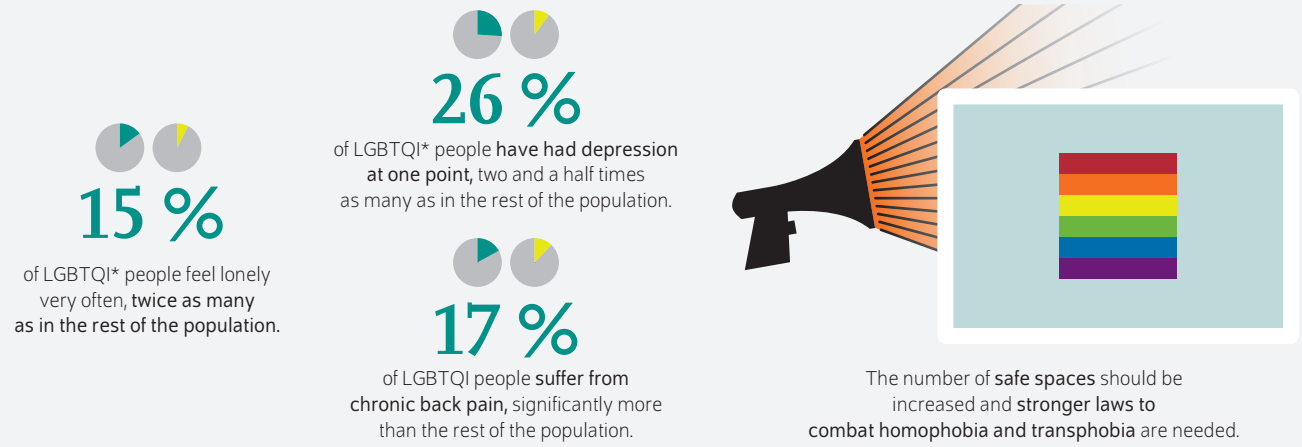
AT A GLANCE

LGBTQI* people in Germany face staggering health disparities

By David Kasprowski, Mirjam Fischer, Xiao Chen, Lisa de Vries, Martin Kroh, Simon Kühne, David Richter, and Zaza Zindel

- LGBTQI* people in Germany three times more likely to suffer from depression and burnout than the rest of the population
- Share of LGBTQI* people with heart disease, migraines, asthma, and chronic back pain significantly higher compared to the rest of the population
- Forty percent of trans* people have been diagnosed with anxiety disorders
- LGBTQI* people twice as likely to feel lonely compared to the rest of the population
- LGBTQI* community safe spaces including leisure activities and counseling must be strengthened; stronger laws to combat homophobia and transphobia needed

Share of LGBTQI* people with poor mental and physical health is much higher than in the rest of the population



Sources: Socio-Economic Panel v36.beta; LGBiefeld; authors' own calculations.

FROM THE AUTHORS

"Regarding equal opportunities of LGBTQI people to lead healthy lives, there is still a long way to go. Societal and institutional discrimination go hand in hand with these staggering mental and physical health disparities."*

— Mirjam Fischer —

MEDIA

Audio Interview with David Kasprowski (in German)
www.diw.de/mediathek

LGBTQI* people in Germany face staggering health disparities

By David Kasprowski, Mirjam Fischer, Xiao Chen, Lisa de Vries, Martin Kroh, Simon Kühne, David Richter, and Zaza Zindel

ABSTRACT

Discrimination and rejection experienced by LGBTQI* people affect their mental health and, in the long term, their physical health as well. Survey data from the Socio-Economic Panel and Bielefeld University show that LGBTQI* people in Germany are affected by negative mental health outcomes three to four times more often than the rest of the population. Poor physical health that may be stress-related, such as heart disease, migraines, asthma, and chronic back pain, are also far more common. A person's general well-being depends in part on their social environment. LGBTQI* people, and trans* people in particular, often feel lonely, which is cause for concern in view of increasing loneliness among most people during the coronavirus pandemic. The findings point to a marked health gradient, which should be addressed by measures including expanding queer safe spaces and by explicitly naming LGBTQI* hate crimes in the criminal code.

LGBTQI* equality goals have been on the political agenda for years, both in Germany and at the European level,[1] resulting in a series of legislative changes, such as the legalization of same-sex marriage and the legal recognition of a third gender option. As a result, LGBTQI* (lesbian, gay, bisexual, trans, queer, and intersex) people increasingly moved into the focus of the public eye (see Box 1 for definitions).

Numerous studies show that LGBTQI* people experience discrimination in many areas of life, such as in the labor market.[2] International research also shows that these experiences and the constant vigilance due to the anticipation of rejection and hostility negatively impact mental and physical health.[3] LGBTQI* people, therefore, have a higher risk of suffering from poor mental health, including depression, anxiety disorders, and suicidal ideation.[4]

In addition, German studies have shown that LGBTQI* people not only face frequent everyday discrimination but also

1 Federal Ministry for Family Affairs, Senior Citizens, Women and Youth *(Bundesministerium für Familie, Senioren, Frauen und Jugend), LSBTI-Maßnahmen (Stand 21. Juli 2020)* (2020) (in German; available online, accessed on January 13, 2021. This applies to all other online sources in this report unless stated otherwise); EU Commission, *Union of Equality: LGBTQI Equality Strategy 2020–2025* (2020) (available online).

2 Lisa de Vries et al., "LGBTQI* People on the Labor Market: Highly Educated, Frequently Discriminated Against," *DIW Weekly Report* no. 36 (2020): 123–133 (available online); Dominic Frohn, "Die Arbeitssituation von LSBT*-Beschäftigten: Reanalyse einer Online-Befragung unter differenzieller Perspektive," *Zeitschrift für Sexualforschung* 27 (2014): 328–351 (in German); Nick Drydakis, "Sexual orientation and labor market outcomes," *IZA World of Labor* (2019); Ali M. Ahmed et al., "Are gay men and lesbians discriminated against in the hiring process?" *Southern Economic Journal* 79, no. 3 (2013): 565–585.

3 Known as minority stress: Ilan H. Meyer, "Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence," *Psychological Bulletin* 129, no. 5 (2003): 674–697; Bodo Lippl et al., *Homophobe Anfeindungen aus Sicht von Schwulen, Bisexuellen und Trans* Personen (GBT). Strategien und Maßnahmen zu Schutz, Aufklärung und Prävention* (Berlin, New York, São Paulo: MANEO, 2012) (in German).

4 Nathaniel Lewis, "Mental health in sexual minorities: Recent indicators, trends, and their relationships to place in North America and Europe," *Health and Place* 15, no. 4 (2009): 1029–1045; Michael P. Marshal et al., "Suicidality and Depression Disparities between Sexual Minority and Heterosexual Youth: A Meta-Analytic Review," *Journal of Adolescent Health* 49, no. 2 (2011): 115–123; Ulrike Boehmer et al., "Caregiving status and health of heterosexual, sexual minority, and transgender adults: Results from select US regions in the Behavioral Risk Factor Surveillance System 2015 and 2016," *The Gerontologist* 59, no. 4 (2019): 760–769.

DOI: https://doi.org/10.18723/diw_dwr:2021-5-1

Box 1

Terms and definitions

The acronym LGBTQI* (lesbian, gay, bisexual, trans, queer, and inter) is used to summarize different sexual orientations and gender identities. The star indicates the acronym includes further sexual orientations and gender identities that are not explicitly listed in the acronym.

In the SOEP and LGBielefeld surveys, sexual orientation answer categories include heterosexual, gay/lesbian, bisexual, or another orientation. The latter is a write-in answer, which allows for a broader inclusion of sexual orientations such as pansexual, polysexual, demisexual, asexual, and queer. In the analyses for this report, we compare all people who identify with any minoritized sexual identity with people who self-identify as heterosexual.

Gender identitiy in the SOEP and LGBielefeld surveys (see Box 2) is measured according to an internationally standardized two-step method.[1] First, respondents indicate which sex they were assigned at birth on their birth certificate (male or female).[2] Next, they provide their self-ascribed gender identity. Here, in addition to the answer categories male and female, the option transgender and a write-in option were offered.

People whose current gender identity matches their sex assigned at birth are denoted by the prefix "cis" (Latin, "on the same side"). People for whom that is not the case are summarized under the umbrella term "trans*" (Latin, "on another side"). This term encompasses people who have transitioned from male to female or from female to male and people who do not or only partly identify with the gender binary, (e.g., agender, genderqueer, demigender, genderfluid, or non-binary people).[3]

The SOEP core survey, which provides the comparison group for this study, still measures gender in a binary manner (man or woman). Unfortunately, this does not allow for a distinction between cis and trans* people. We refer to the comparison group as cis-heterosexual people nonetheless, as the number of trans* people in this group is likely low and statistically insignificant.[4]

1 Greta R. Bauer et al., "Transgender-inclusive measures of sex/gender for population surveys: Mixed methods evaluation and recommendations," *PLoS ONE* 12, no. 5 (2017) (available online). For differentiated coverage between inter* and endo* people, see: Dominic Frohn et al., *»Inter* im Office?!« Die Arbeitssituation von inter* Personen in Deutschland unter differenzieller Perspektive zu (endo*) LSBT*Q+ Personen* (Cologne: IDA, Institut für Diversity- & Antidiskriminierungsforschung: 2020) (in German).

2 The respondents in this study were born before the legal introduction of a third gender option in Germany. Thus, at the time, the only available options were male or female.

3 Federal Anti-Discriminiation Agency *(Antidiskriminierungsstelle des Bundes)*, ADS (available online).

4 According to international estimates, trans* people make up about 0.6 percent of the overall population, which makes the likelihood of statistical bias small. Cf. Flores et al., *How many adults identify as transgender in the United States?* (Williams Institute: 2016) (available online; accessed on January 14, 2021).

experience violence.[5] Evidence suggests that the greater frequency of physical illness among LGBTQI* people may be a result of chronic stress.[6] A comparison with the group of cisgender heterosexual people (cisgender/cis: people whose gender identity matches their sex assigned at birth) in the following section examines whether a structural disadvantage exists, both in terms of mental and physical health and in terms of social networks as a possible resilience factor.

Thus far, existing data has hardly allowed for the joint analysis of both health disparities and possible resilience factors such as social networks in comparison with the cis-heterosexual majority.[7] To strengthen the data infrastructure, the German Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung*) funded a random boost sample of LGBTQI* households to the Socio-Economic Panel (*Sozio-Ökonomisches Panel,* SOEP)[8] in 2019.[9] This Weekly Report also uses data from a simultaneously conducted online survey of LGBTQI* people by Bielefeld University (the LGBielefeld project).[10] The results show that in addition to a markedly higher incidence of poor physical and mental health, LGBTQI* people on average also feel

5 Lippl et al., *Homophobe Anfeindungen aus Sicht von Schwulen, Bisexuellen und Trans* Personen (GBT)*; Tamás Jules Fütty et al., *Geschlechterdiversität in Beschäftigung und Beruf. Bedarfe und Umsetzungsmöglichkeiten von Antidiskriminierung für Arbeitgeber_innen* (Berlin: Federal Anti-Discriminiation Agency, 2020) (in German); Albrecht Lüter, Sarah Riese, and Almut Sülzle, *Berliner Monitoring Trans- und Homophobe Gewalt* (Berlin: Werkstatt für Fortbildung, Praxisbegleitung und Forschung im sozialen Bereich GmbH, 2020) (in German; available online).

6 Gunter Heylens et al., "Psychiatric characteristics in transsexual individuals: multi-centre study in four European countries," *The British Journal of Psychiatry* 204 (2014): 151–156; Frank A. Sattler, Ulrich Wagner, and Hanna Christiansen, "Effects of minority stress, group-level coping, and social support on mental health of German gay men," *PLoS One* 11, no. 3 (2016): e0150562; Frank A. Sattler et al., "Mental health differences between German gay and bisexual men and population-based controls," *BMC Psychiatry* 17, no. 1 (2017): 1–7; Pöge et al., "Die gesundheitliche Lage von lesbischen, schwulen, bisexuellen sowie trans- und intergeschlechtlichen Menschen," *Journal of Health Monitoring* 5, S1 (2020): 1–30.

7 See Pöge et al., "Die gesundheitliche Lage."; There were indications for less emotional intimacy with parents and for less contact with fathers for people who are in a same-sex relationship or want to be compared to people in opposite sex relationships. Karsten Hank und Veronika Salzburger, "Gay and Lesbian Adults' Relationship With Parents in Germany," *Journal of Marriage and Family* 77, no. 4 (2015): 866–876.

8 Jan Goebel et al., "The German Socio-Economic Panel Study (SOEP)," *Journal of Economics and Statistics* 239, no. 2 (2019): 345–360.

9 "Supplementing the SOEP Data Infrastructure with a Sample of Lesbians, Gays, and Bisexuals (SOEP-LGB)" project and "Gender and Sexual Diversity in Focus: Participation and Diversity of Lifestyles (SOEP-GeSMin)" project (grant numbers 01UW1803A, 01UW1803B, 01UW2002A, and 01UW2002B). DFG Network Sexual Orientation and Gender Identity in Germany (SOGI-GER)—Bundling Interdisciplinary Expertise (FI 2490/1-1).

10 LGBielefeld survey affiliated with the Research and Teaching Unit "Methods of Empirical Social Research" at Bielefeld University; see Simon Kühne and Zaza Zindel, "Using Facebook & Instagram to Recruit Web Survey Participants: A Step-by-Step Guide and Application," *Survey Methods: Insights from the Field* (2020) (available online).

Box 2

Methods and data

Data infrastructure in Germany and data used

Overall, the availability of survey data on sexual orientation and gender identity in Germany needs improving.[1] Nevertheless, efforts in recent years are beginning to show results: Following initial data collections on the labor market situation of LGBTQI* people in Germany,[2] same-sex couples could only be researched by using the official statistics of the German microcensus data.[3] Further studies in Germany were conducted with foci on various specific sub-groups within the LGBTQI* communities.[4]

The SOEP and LGBielefeld data are complementing these existing approaches. Conducted annually since 1984, SOEP is a representative panel survey of private households in Germany wherein all household members are interviewed on various life domains (such as work, family, and health). Thanks to the large number of SOEP respondents (currently aproximately 30,000 interviews in over 20,000 households per year), lesbian women, gay men, and bisexual people are well-represented. In 2016, SOEP respondents were surveyed once on their sexual orientation. In 2019, the data infrastructure was strengthened with a randomized boost sample called "SOEP-LGB." The boost sample added over 450 households with at least one non-heterosexual or non-cisgender household member to the existing panel (Table 1). The majority of the SOEP interviews are conducted via computer-assisted, personal interviews by professional interviewers.

We supplement the analyses based on the SOEP and SOEP-LGB boost sample with data from the LGBielefeld project. This provides us with sufficient case numbers to draw comparisons between different groups among the people who identify with minoritized sexual and gender identities. This approach is analogous to the one used in the DIW Weekly Report on the labor market situation of LGBTQI* people published in 2020.[5]

The combined SOEP and LGBielefeld data from 2019 results in a total of 28,168 adults over the age of 18; 23,657 of respondents self-identify as heterosexual and 4,511 self-identify as LGBTQI*. Despite these extensive case numbers, comparisons within the LGBTQI* group should be interpreted with caution as case count can be low for some groups.

Weighting procedure

All results in this report are based on weighted analyses. The weighting factors in the SOEP data account for different selection probabilities (design weights) and different respondent participation probabilities (non-response weights). Weighing the data allows us to make general statements on the living situation of lesbian women, gay men, and bisexual people in Germany.[6] Moreover, the social media recruitment sample from the LGBielefeld project is weighted using a marginal fitting procedure also known as raking or iterative proportional fitting. In order to minimize bias, the distributions of socio-demographic key variables are corrected to correspond to the weighted distributions of the SOEP data, specifically age, residential state, education level, vocational training, partnership status, and parenthood.[7]

1 Pöge et al., "Die gesundheitliche Lage."

2 Dominik Frohn, *Out im Office?! Sexuelle Identität, (Anti-) Diskriminierung und Diversity am Arbeitsplatz* (Cologne: Schwules Netzwerk, 2007) (in German). This work was funded by the *Ministerium für Generationen, Familie, Frauen und Integration* in North Rhine-Westphalia (in German).

3 Andrea Lengerer and Jeanette Bohr, "Is there an Increase in Same-Sex Couples in Germany?," *Theoretical Considerations and Empirical Findings* 48, no. 2 (2019): 136–157.

4 De Vries et al., "LGBTQI* People on the Labor Market,"; Fütty et al., *Geschlechterdiversität in Beschäftigung und Beruf* (in German); Dominic Frohn et al., *»Inter* im Office?!« Die Arbeitssituation von inter* Personen in Deutschland unter differenzieller Perspektive zu (endo*) LSBT*Q+ Personen,* (Cologne: IDA, 2020) (in German); Dominic Frohn et al., *Spezifika der Arbeitssituation von inter* Bechäftigten in Deutschland auf Grundlage von qualitativen Interviews mit inter* Experten_innen,* (Cologne: IDA, 2019) (in German).

Table 1

Sexual orientation and gender identity in the samples used

	SOEP		LGBielefeld		Total	
	Number	Percent	Number	Percent	Number	Percent
Sexual orientation						
Heterosexual	4	0.4	0	0.0	4	0.1
Lesbian/gay	440	47.0	2,297	64.3	2,737	60.7
Bisexual	477	51.0	961	26.9	1,438	31.9
Pansexual	9	1.0	210	5.9	219	4.9
Asexual	3	0.3	27	0.8	30	0.7
Other	3	0.3	80	2.2	83	1.8
Total	936	100	3,575	100	4,511	100
Gender						
Cis man	428	45.7	1,302	36.4	1,730	38.4
Cis woman	473	50.5	1,977	55.3	2,450	54.3
Trans*	21	2.2	177	5.0	198	4.4
Other	14	1.5	119	3.3	133	2.9
Total	936	100	3,575	100	4,511	100

1 A small share of heterosexual respondents are included in the sample because they have self-identified as trans*, non-binary, genderqueer, genderfluid, agender, demigender, or intersex.

Sources: Socio-Economic Panel (Soep.v36.beta), LGBielefeld; authors' own calculations.

5 De Vries et al., "LGBTQI* People on the Labor Market."

6 De Vries et al.,. „Design, Nonresponse, and Weighting in the 2019 Sample Q of the Socio-Economic Panel," *SOEP Survey Papers 940: SOEP Survey Papers Series C – Data* (2021).

7 Kühne and Zindel, "Using Facebook & Instagram to Recruit Web Survey Participants."

Age correction

Both health and social networks are age dependent: As a person ages, poorer physical health and fewer social contacts become increasingly more likely. In our compiled dataset, the cis-heterosexual comparison group is ten years older on average than the LGBTQI* group (Table 2).

In order to be able to compare people within their age groups, we adjust the age distribution of cis-heterosexual respondents to the age of the LGBTQI* respondents. For the sake of completeness, we present both the age-adjusted and the non-adjusted values. Any reported significance levels refer to the within-age comparisons using the age-adjusted cis-heterosexual sample.

Table 2

Age according to sexual orientation and gender
Shares in percent

Age	Total LGBTQI*		
	Cis-heterosexual	LGBTQI*	Total
18 to 29	15.0	26.9	15.9
30 to 39	15.8	22.5	15.8
40 to 49	15.3	16.2	14.9
50 to 59	20.1	22.0	19.7
60 to 69	15.7	7.1	15.1
70+	18.1	5.3	18.6
Average age	51.0	41.3	50.6
Number of cases	23,657	4,511	28,168

Sources: Socio-Economic Panel (SOEP v36.beta); LGBielefeld; authors' own calculations, weighted.

lonely significantly more often than the cis-heterosexual population in Germany.[11]

Staggering physical and mental health disparities

Compared to the rest of the population, LGBTQI* people, and trans* people in particular, suffer significantly more often from poor physical and mental health.

Depression and burnout diagnoses more prevalent among LGBTQI* people

In terms of mental health, 26 percent of LGBTQI* respondents have been diagnosed with depression at one point, compared to only ten percent of cis-heterosexual respondents (Figure 1). Diagnosed sleep disorders were reported twice as often and burnout[12] almost three times as often. Moreover, LGBTQI* people were nearly twice as likely as cis-heterosexual people to have taken over six weeks of sick leave from work in 2019. These findings are suggestive of severe (chronic) stress experiences in their everyday lives.

There are also significant differences within the LGBTQI* population: Thirty-nine percent of trans* respondents have been diagnosed with an anxiety disorder while only nine percent of the cisgender people within the LGBTQI* group (Figure 1b) have been. Moreover, 11 percent of trans* people report that they have been diagnosed with an eating disorder at one point, which is three times higher than for cisgender people within the group of LGBTQI* respondents.

Poor physical health suggests chronic stress exposure

LGBTQI* people also have poorer physical health than the rest of the population. While there are no statistically meaningful differences in terms of cancer, strokes, high blood pressure, and joint diseases, the average incidence of heart disease and migraines is almost twice as high as it is in the rest of the population at just under ten and 12 percent, respectively (Figure 2). Chronic back pain is also reported more frequently: Seventeen percent of the LGBTQI* respondents compared to only 12 percent in the cis-heterosexual population. These health disparities are generally interpreted as a result of chronic stress experienced by LGBTQI* people in their everyday lives in the form of (anticipated) discrimination and the resulting constant vigilance.[13]

Loneliness and affective well-being are important for mental health

Loneliness presents a significant threat to mental health. It occurs when a person's social relationships do not meet their needs and expectations, regardless of how the number or quality is assessed from the outside.

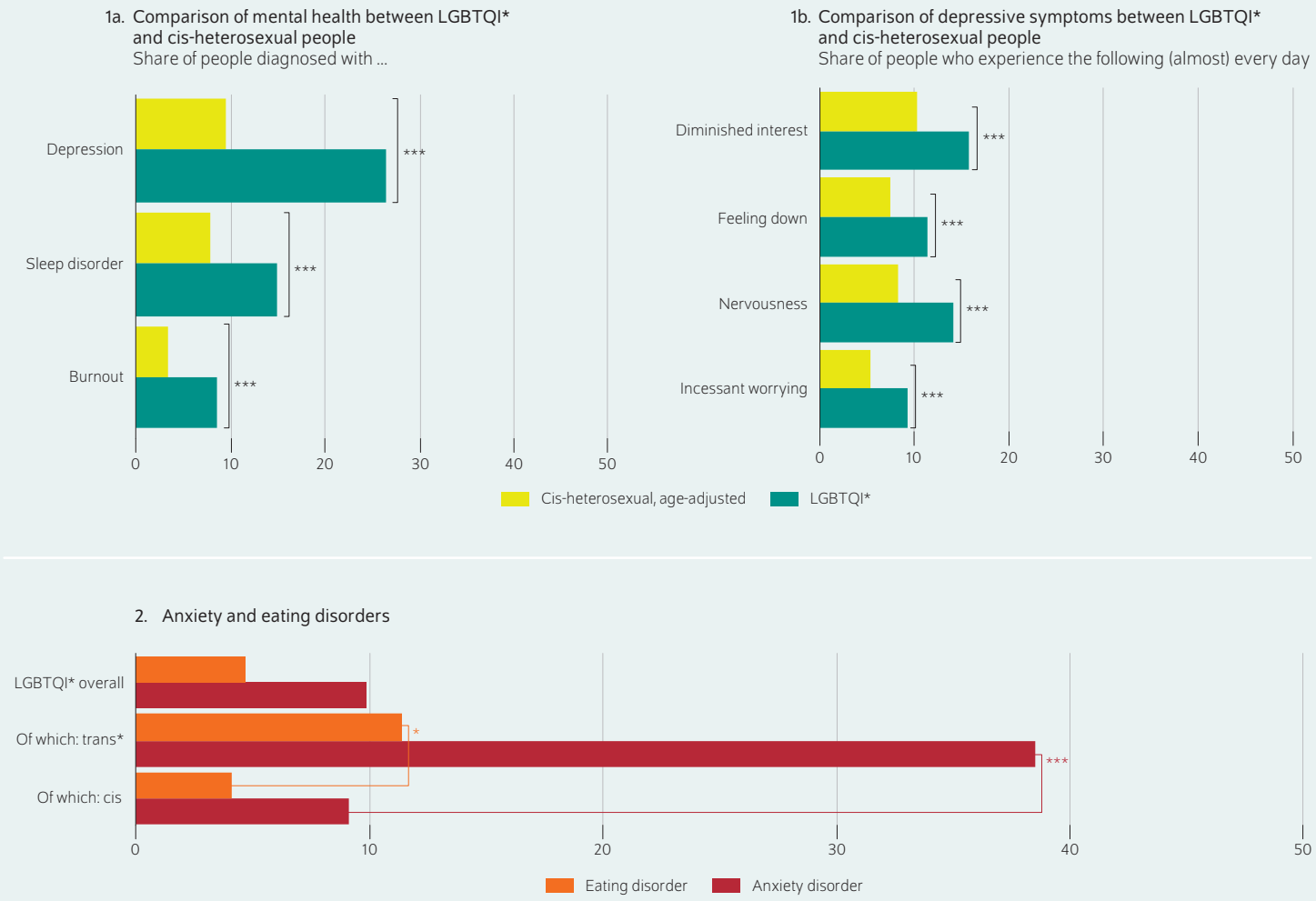
11 Comparisons between LGBTQI* people and the cis-heterosexual population are made using an age-adjustment to preserve comparability of these groups. Non-age-adjusted analyses are presented for completeness only (see Box 2).

12 Occupational burnout is included in the 11th Revision of the International Classification of Diseases (ICD-11) and defined as "feelings of energy depletion" and "state of complete exhaustion" (diagnosis code: Z73.0). Burnout is not a medical diagnosis in its own right. Rather, it is understood as factors that negatively affect a person's health or result in the use of health services. Burnout is considered exclusively the result of work overload or chronic stress at work. Cf. World Health Organization, *Burn-out an "occupational phenomenon": International Classification of Diseases* (2019) (available online).

13 Francisco Perales and Abram Todd, "Structural stigma and the health and well-being of Australian LGB populations: Exploiting geographic variation in the results of the 2017 same-sex marriage plebiscite," *Social Science & Medicine* 208 (2018): 190–199.

Figure 1

Mental health
Shares in percent



Notes: In order to ensure the comparability of the cis-heterosexual reference group, this group was age-corrected (Box 2). The significance levels in parts 1a and 1b refer to the difference between the values for "cis-heterosexual, age-adjusted" and "LGBTQI*." The stars ***, **, and * indicate the significance at the 0.1, one, and five percent level, respectively (probability of error decreases with number of stars).

Sources: Parts 1a and 1b: Socio-Economic Panel (Soep.v36.beta); LGBielefeld; authors' own calculations, weighted. Part 2: LGBielefeld; authors' own calculations, weighted.

LGBTQI* people are at a significant disadvantage when it comes to mental health; trans* people in particular suffer from anxiety disorders more frequently.

Loneliness especially high among trans* people

Fifteen percent of LGBTQI* respondents indicated they miss the company of others (very) often (Figure 3), which is twice as many people compared to the rest of the population. For trans* people, the share is 31 percent. Turning to the subjective perception of social isolation, a similar picture emerges. Findings based on survey data collected prior to the coronavirus pandemic show that 11 percent of LGBTQI* respondents, including 37 percent of trans* respondents, experience feelings of social isolation (very) often. In contrast, only five percent of cis-heterosexual respondents reported frequent feelings of social isolation. These findings suggest a particularly worrisome situation for LGBTQI* people during the coronavirus pandemic, as initial studies of pandemic effects indicate increasing loneliness within the entire population.[14]

Depressive symptoms frequently impact LGBTQI* people's everyday lives

With regard to emotional well-being, there are both similarities and differences between the LGBTQI* and cis-heterosexual population. Sixty-six percent of all LGBTQI* and

14 Theresa Margareta Entringer et al., "Psychische Krise durch Covid-19? Sorgen sinken, Einsamkeit steigt, Lebenszufriedenheit bleibt stabil," *SOEPpapers on Multidisciplinary Panel Data Research* no. 1087 (2020) (in German); Stefan Liebig et al., "Ost-und Westdeutschland in der Corona-Krise: Nachwendegeneration im Osten erweist sich als resilient," *DIW Wochenbericht* no. 38 (2020): 721–729 (available online).

cis-heterosexual respondents indicated that they felt happy (very) often over the past four weeks. Within that same time period, however, LGBTQI* people also reported feeling angry, anxious, and sad (very) often. Compared to cis people within the LGBTQI* group, nearly twice as many trans* people experienced frequent feelings of anxiety and sadness. Moreover, LGBTQI* people indicated disruptions in their daily lives by symptoms of depression, such as feeling down, nervousness, and a loss of interest in daily life, on more than half of the days over the two-week period.[15]

Social networks point toward active resilience strategies among LGBTQI* people

Building strong social networks can function as one type of resilience strategy, as their makeup is tied to access to emotional and financial resources. As such, social relations may be able to partially offset or amplify health inequalities and loneliness. Both the relationship with the family of origin[16] and friendships can be essential to counteract the effects of loneliness and to deal with personal setbacks or crises.

Ambivalent relationship with family of origin

The relationship with the family of origin can be strained if the family does not respond well to their family member's sexual orientation or gender identity. While 43 percent of cis-heterosexual respondents visit family members or relatives at least once a week, this only applies to 29 percent of the LGBTQI* respondents (Figure 4). They are also less likely to share personal thoughts or feelings with their family of origin. Nevertheless, they would turn to their family of origin just as often as the cis-heterosexual respondents in times of crisis (e.g., needing long-term care following an accident).

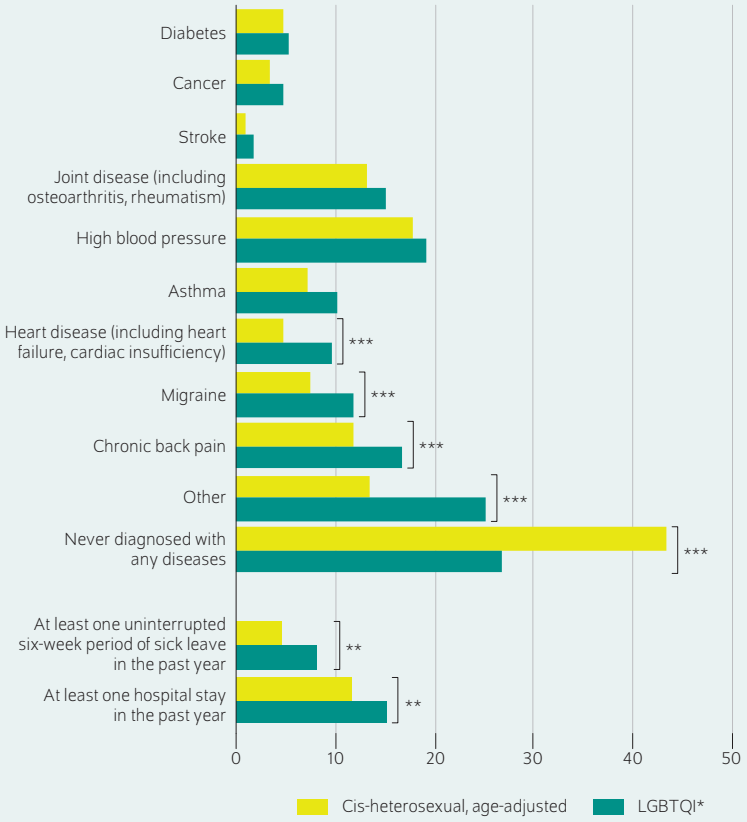
LGBTQI* people particularly rely on friendships and other relationships outside the family of origin

Weekly and daily visits from friends, acquaintances, or neighbors are somewhat more common among LGBTQI* people (52 percent) than among the rest of the population (46 percent). Major differences emerged with regard to whom people choose to confide in: Seventy-three percent of the LGBTQI* respondents share their personal thoughts and feelings with their friends, acquaintances, and neighbors, while this is the case for less than half of cis-heterosexual people. One in two LGBTQI* people would also turn to friends, acquaintances, and neighbors if they needed long-term care, while only one in three cis-heterosexual people would do so. This suggests that LGBTQI* people actively build networks to counteract both health inequalities and the social isolation they face.[17]

Figure 2

Physical health
Shares in percent

"Has a doctor ever diagnosed you with one or more of the following illnesses?"



Notes: In order to ensure the comparability of the cis-heterosexual reference group, this group was age-corrected (Box 2). The significance levels refer to the difference between the values for cis-heterosexual, age-adjusted" and "LGBTQI*." The stars ***, **, and * indicate the significance at the 0.1, one, and five percent level, respectively (probability of error decreases with number of stars).

Sources: Socio-Economic Panel (Soep.v36.beta); LGBielefeld; authors' own calculations, weighted.

There are enormous differences between the physical health of LGBTQI* people and the cis-heterosexual population.

Conclusion: Strengthen community resilience and diversity; counteract homophobia and transphobia more strongly

The analyses of the SOEP and the LGBielefeld surveys among LGBTQI* people clearly show that there is still much to be done to ensure equal opportunities to leading a healthy life. The marked differences in both mental and physical

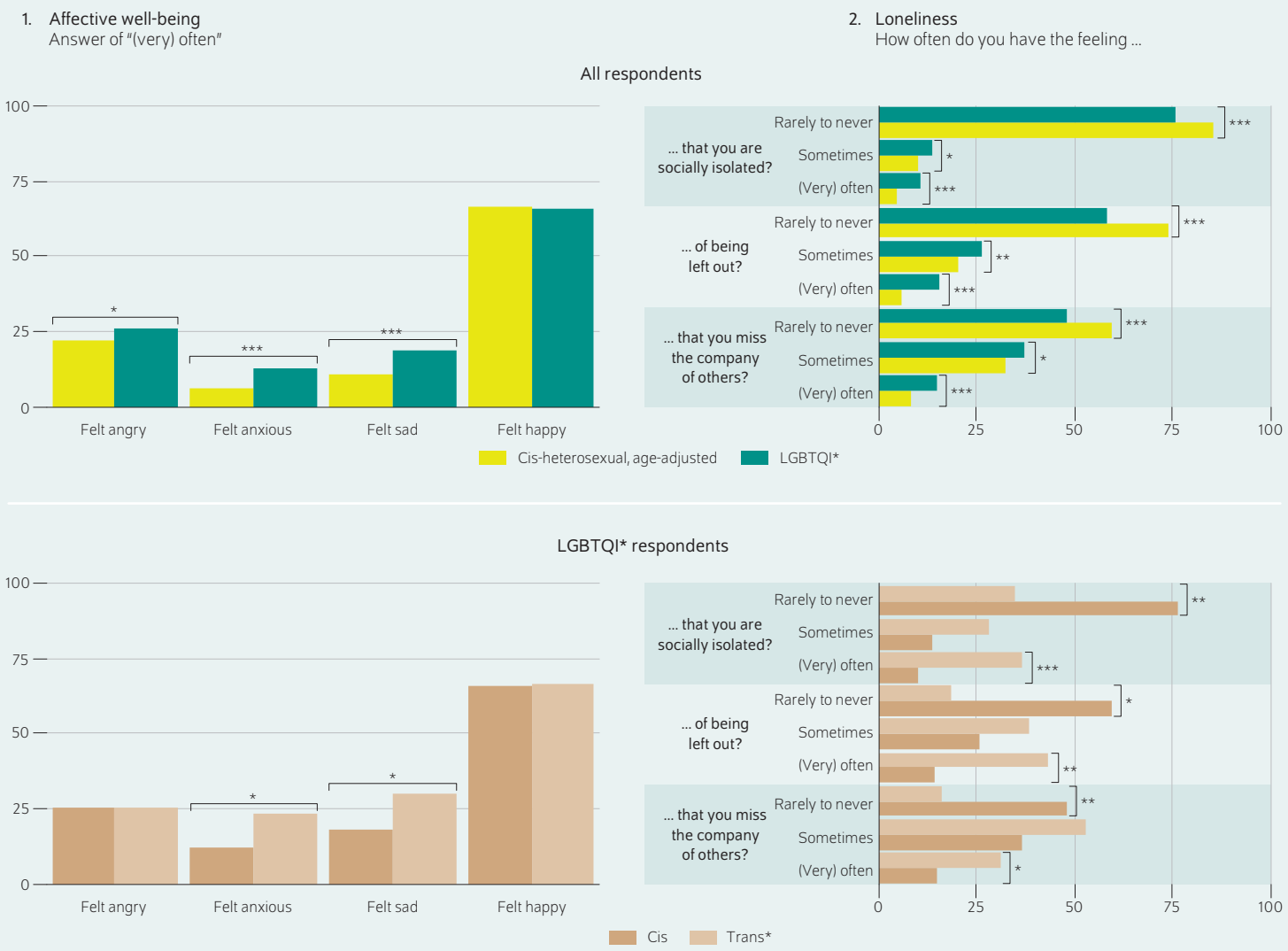
15 According to the measuring instrument "PHQ-4" for depression and anxiety symptoms without compelling disease value: Bernd Löwe et al., "A 4-item measure of depression and anxiety: Validation and standardization of the Patient Health Questionnaire-4 (PHQ-4) in the general population," Journal of Affective Disorders 122, no. 1–2 (2010): 86–95

16 Here, "family of origin" refers to the family in which the respondents grew up, including relatives and excluding any possible partners or children. The family of origin is a conceptual distinction from the concept of chosen family, which LGBTQI* people sometimes use to refer to particularly close relationships and friendships. Kath J. Weston, *Families We Choose* (New York, NY: Columbia University Press, 1991).

17 Alexis Dewaele et al., "Families of choice? *Exploring the supportive networks of lesbians, gay men, and bisexuals*," *Journal of Applied Social Psychology* 41, no. 2 (2011): 312–331; Mirjam Fischer and Matthijs Kalmijn, "Do Adult Men and Women in Same-Sex Relationships Have Weaker Ties to Their Parents?" *Journal of Family Psychology* (2020) (available online).

Figure 3

Affective well-being and loneliness
Shares in percent



Notes: In order to ensure the comparability of the cis-heterosexual reference group, this group was age-corrected (Box 2). The significance levels in the "All respondents" figure refer to the differences between the values for "cis-heterosexual, age-adjusted" and "LGBTQI*." In the "LGBTQI respondents" figure, the significance levels refer to the difference between the values for "cis" and "trans*." The stars ***, **, and * indicate the significance at the 0.1, one, and five percent level, respectively (probability of error decreases with number of stars).

Sources: Parts 1 and 2: Socio-Economic Panel (Soep.v36.beta); LGBielefeld; authors' own calculations, weighted.

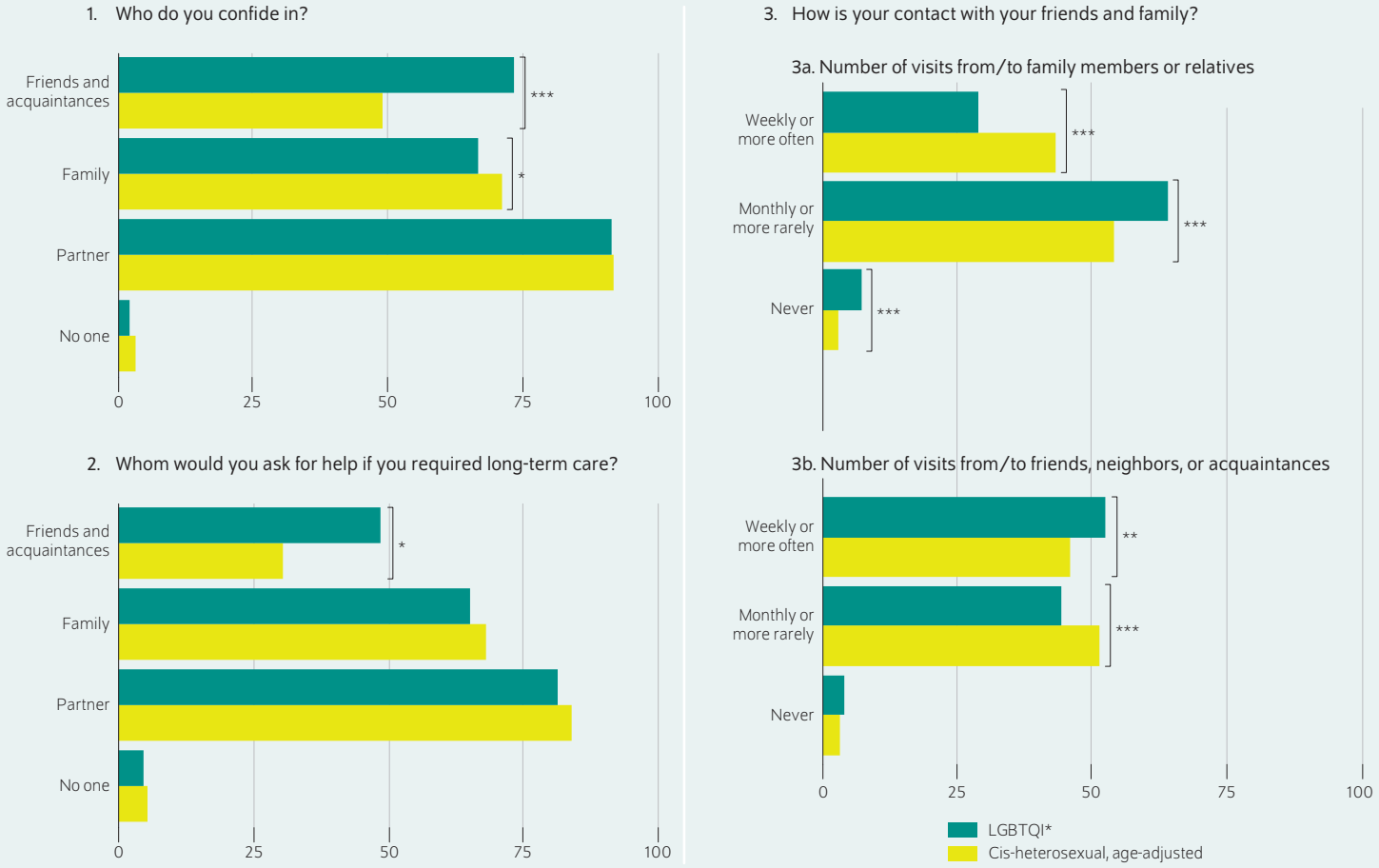
Everyday life is affected by loneliness and lower affective well-being; particularly, trans* people often feel lonely.

health clearly suggest that LGBTQI* people experience unique stressors in their everyday lives. Overall, the legislative changes over the past years are laudable. However, the findings in this report make it unmistakably clear that these changes do not suffice in undoing the legacy of years and years of institutional discrimination. LGBTQI*-inclusive legislation must continue to evolve. This applies in particular to trans* people, who are still pathologized under the current legal situation: a psychiatric diagnosis—declaring them sick—is required in order to access gender-affirming heath care. It is crucial to actively combat the conflation of sexual and gender diversity with mental illness in order to credibly acknowledge LGBTQI* people's humanity and dignity. Moreover, homophobia and transphobia should be defined clearly as hate crimes in the criminal code and sanctioned accordingly.[18] This offers LGBTQI* people more protection, and could begin to reduce fear.

18 See the statement of the *Lesben- und Schwulenverband* (LSVD) on the Law to Combat Right-Wing Extremism and Hate Crimes from January 17, 2020 (in German; available online; accessed on January 18, 2021).

Figure 4

Social support networks
Shares in percent



Notes: In order to ensure the comparability of the cis-heterosexual reference group, this group was age-corrected (Box 2). The significance levels refer to the differences between the values for "cis-heterosexual, age-adjusted" and "LGBTQI*." The stars ***, **, and * indicate the significance at the 0.1, one, and five percent level, respectively (probability of error decreases with number of stars).

Sources: Parts 1 and 2: Socio-Economic Panel (Soep.v36.beta for SOEP-Core v33); LGBielefeld; authors' own calculations, weighted.

Compared to the cis-heterosexual population, LGBTQI* people place great trust in their friends and rely on them for support.

Furthermore, LGBTQI* safe spaces and services, such as counseling, recreational activities, queer meeting places, cultural programs, and sports clubs, should be strengthened with subsidies, including in smaller municipalities. Moreover, significant efforts to advance anti-discrimination policies are required in the long run. This includes initiatives to promote societal acceptance of LGBTQI* people in mainstream society, such as mandatory training courses and workshops[19] at schools and in businesses.

19 See the "InTraHealth" project for more information: Gabriele Dennert, *InTraHealth – Improving access to health care for inter- and transgender people by reducing discrimination as a provider-side barrier to entry* (2019) (available online, accessed January 18, 2021).

Xiao Chen is a student assistant in the Socio-Economic Panel research Infrastructure at DIW Berlin | xchen@diw.de

Lisa de Vries is a research associate at Bielefeld University | lisa.de_vries@uni-bielefeld.de

Mirjam Fischer was a research associate in the Socio-Economic Panel Research Infrastructure at DIW Berlin and is a research associate at the University of Cologne | m.fischer@uni-koeln.de

David Kasprowski is a research associate in the Socio-Economic Panel Research Infrasturcture at DIW Berlin | dkasprowski@diw.de

Martin Kroh is Professor of Quantitative Methods of Empirical Social Research at Bielefeld University and a senior research fellow in the Socio-Economic Panel Research Infrastructure at DIW Berlin | martin.kroh@uni-bielefeld.de

Simon Kühne is a research associate at Bielefeld University | simon.kuehne@uni-bielefeld.de

David Richter is the Survey Manager SOEP-IS for the Socio-Economic Panel Infrastructure Research at DIW Berlin and Professor of Survey Research at the Department of Educational Science and Psychology at the Free University of Berlin | drichter@diw.de

Zaza Zindel is a research associate at Bielefeld University | zaza.zindel@uni-bielefeld.de

JEL: J7, J15, J16

Keywords: LGBTQI*, trans*, mental health, health disparities, social networks, family ties, friendship ties

LEGAL AND EDITORIAL DETAILS

DIW Berlin — Deutsches Institut für Wirtschaftsforschung e. V.
Mohrenstraße 58, 10117 Berlin
www.diw.de
Phone: +49 30 897 89–0 Fax: –200
Volume 11 February 10, 2021

Publishers
Prof. Dr. Tomaso Duso; Prof. Marcel Fratzscher, Ph.D.; Prof. Dr. Peter Haan; Prof. Dr. Claudia Kemfert; Prof. Dr. Alexander S. Kritikos; Prof. Dr. Alexander Kriwoluzky; Prof. Dr. Stefan Liebig; Prof. Dr. Lukas Menkhoff; Dr. Claus Michelsen; Prof. Karsten Neuhoff, Ph.D.; Prof. Dr. Carsten Schröder; Prof. Dr. C. Katharina Spieß; Dr. Katharina Wrohlich

Editors-in-chief
Dr. Gritje Hartmann; Dr. Anna Hammerschmid (Acting editor-in-chief)

Reviewer
Jonas Jessen

Editorial staff
Marten Brehmer; Rebecca Buhner; Claudia Cohnen-Beck; Petra Jasper; Sebastian Kollmann; Sandra Tubik; Kristina van Deuverden

Sale and distribution
DIW Berlin Leserservice, Postfach 74, 77649 Offenburg
leserservice@diw.de
Phone: +49 1806 14 00 50 25 (20 cents per phone call)

Layout
Roman Wilhelm, DIW Berlin

Cover design
© imageBROKER / Steffen Diemer

Composition
Satz-Rechen-Zentrum Hartmann + Heenemann GmbH & Co. KG, Berlin

ISSN 2568-7697